

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A door assembly for an instrument panel interior component of a vehicle comprising:
 - a door body movably attached to an instrument panel ~~an interior component of a vehicle~~, wherein the instrument panel and said door body define a glove box;
 - a sensor adapted to generate a signal that is a function of a desired position of said door body; and
 - an actuator selectively coupled to said door body, wherein said actuator is adapted to move said door body in response to said signal to achieve a desired position of said door body relative to said instrument panel interior component.
2. (Currently amended) The door assembly according to Claim 1, wherein said instrument panel interior component includes an outer surface defining an opening therein and wherein said door body is movable between a closed position in which the door body is positioned generally flush with said outer surface of said instrument panel interior component to cover the opening within the instrument panel interior component and an open position in which the door body is positioned to allow access to the opening within the instrument panel interior component from the passenger compartment of the vehicle.
3. (Previously presented) The door assembly according to Claim 2, wherein said actuator is adapted to move said door body to said open position in response to said signal.
4. (Currently amended) A door assembly comprising:
 - an instrument panel interior component of a vehicle including an outer surface defining an opening therein;

a door body movably attached to the instrument panel interior component of a vehicle, wherein said instrument panel and said door body define a glove box, said door panel being movable between a closed position in which the door body is positioned generally flush with said outer surface of said instrument panel interior component to cover the opening within the instrument panel interior component and an open position in which the door body is positioned to allow access to the opening within the instrument panel interior component from the passenger compartment of the vehicle;

a sensor adapted to generate a signal that is a function of a desired position of said door body; and

an actuator selectively coupled to said door body, said actuator operable to move said door body to said closed position in response to said signal.

5. (Currently amended) The door assembly according to Claim 2, wherein said actuator is adapted to move said door body from said closed position to a position flush with said outer surface of said instrument panel interior component in response to said signal.

6. (Cancelled)

7. (Currently amended) A door assembly for an instrument panel interior component of a vehicle comprising:

a door body movably attached to an instrument panel interior component of a vehicle, wherein said instrument panel and said door body define a glove box;

a sensor adapted to generate a signal that is a function of a desired position of said door body; and

an actuator selectively coupled to said door body, said actuator operable to enable said door body to move in response to said signal, wherein said signal is a function of at least one of the distance between said door body and said instrument panel interior component, the distance between said sensor and said door body, and said sensor and said instrument panel interior component.

8. (Currently amended) A door assembly for an instrument panel interior component of a vehicle comprising:

a door body movably attached to an instrument panel interior component of a vehicle, wherein said instrument panel and said door body define a glove box;

a sensor adapted to generate a signal that is a function of a desired position of said door body; and

an actuator selectively coupled to said door body, said actuator operable to enable said door body to move in response to said signal, wherein said signal is representative of the presence of an object near or in contact with said door assembly.

9. (Original) The door assembly according to Claim 1, wherein said door assembly further comprises a plurality of sensors, each of said plurality of sensors is capable of detecting at least one of a plurality of conditions.

10. (Original) The door assembly according to Claim 1, wherein the sensor includes at least one of a field effect device, an optical sensor, a magnetic sensor, a Hall Effect device, a Piezo device, and a photoelectric device.

11. (Currently amended) The door assembly according to Claim 1, wherein said door assembly further includes a latch mechanism to retain said door body to said instrument panel interior component.

12. (Original) The door assembly according to Claim 11, wherein said latching mechanism is incorporated within said actuator.

13. (Currently amended) The door assembly according to Claim 1, wherein said actuator is adapted to restrain said door body in a desired position relative to said instrument panel interior component.

14. (Currently amended) The door assembly according to Claim 1, wherein at least a portion of said sensor is positioned on said instrument panel ~~interior component~~.

15. (Original) The door assembly according to Claim 1, wherein said door body includes an inner surface and an outer surface, and wherein said sensor is positioned on at least one of said inner surface of said door body and said outer surface of said door body.

16. (Currently amended) A door assembly for an instrument panel ~~interior component~~ of a vehicle comprising:

a door body movably attached to an instrument panel ~~interior component~~ of a vehicle, wherein said instrument panel and said door body define a glove box;

a sensor adapted to generate a signal that is a function of a desired position of said door body; and

an actuator selectively coupled to said door body, said actuator operable to enable said door body to move in response to said signal, wherein said sensor is positioned within said door body such that said sensor is not visible from within the passenger compartment of the vehicle and such that said sensor is adapted to detect a condition occurring near said door assembly within the passenger compartment of the vehicle.

17. (Original) The door assembly according to Claim 1, wherein said actuator comprises at least one of a motor assembly and a damper.

18. (Original) The door assembly according to Claim 1, further comprising a controller, wherein said controller is a microprocessor capable of receiving said signal from said sensor and generating a signal to said actuator.

19. (Currently amended) The door assembly according to Claim 1, wherein said sensor is molded within said instrument panel ~~interior component~~.

20. (Cancelled)

21. (Previously presented) A door assembly for a vehicle comprising:
an interior component defining a storage compartment having an opening;
a door body movably attached to said interior component to selectively cover said opening;
an actuator selectively coupled to said door body, wherein said actuator is operable to enable said door body to move relative to said interior component;
a field effect sensor which provides an electric field such that when a stimulus interrupts the electric field said sensor senses the interruption and generates a signal; and
a controller for receiving said signal from said sensor and operating said actuator to enable said door body to move relative to the component.

22. (Previously presented) The door assembly of Claim 21, wherein said actuator is a latch mechanism adapted to selectively release said door body and permit said door body to move and open said storage compartment.

23. (Previously presented) The door assembly of Claim 21, wherein said actuator includes an electric motor for moving said door body relative to said component.

24. (Previously presented) The door assembly of Claim 21, wherein said field effect sensor is located remotely from said door body.

25. (New) The door assembly of Claim 21, wherein said interior component is an instrument panel, and said instrument panel and said door body define a glove box.